Title: ARTIFICIAL ANTIBODY POLYPEPTIDES

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IN THE CLAIMS

Please cancel claims 7-39 without prejudice. Please amend the claims as follows:

1. [Amended] A fibronectin type III (Fn3) polypeptide monobody comprising [a plurality of] at least two Fn3 β-strand domain [sequences] sequences with a [that are linked to a plurality of] loop region [sequences] sequence linked between each Fn3 β-strand domain sequence,

wherein [one or more of] the monobody loop region [sequences vary] sequence varies by deletion, insertion or replacement of [at least] two to 25 amino acids from the corresponding loop region [sequences] sequence in wild-type Fn3, and

wherein the β -strand [domains] <u>domain</u> of the monobody [have] <u>has</u> at least a 50% total amino acid sequence homology to the corresponding amino acid sequence of wild-type Fn3's β -strand domain [sequences] <u>sequence</u>.

- [Amended] The monobody of claim 1, wherein [at least one] the loop region [is capable of binding] binds to a specific binding partner (SBP) to form a polypeptide:SBP complex having a dissociation constant of less than 10⁻⁶ moles/liter.
- 3. [Amended] The monobody of claim 1, wherein [at least one] the loop region [is capable of catalyzing] catalyzes a chemical reaction with a catalyzed rate constant (k_{cat}) and an uncatalyzed rate constant (k_{uncat}) such that the ratio of k_{cat}/k_{uncat} is greater than 10.
- 4. [Amended] The monobody of claim 1, wherein [one or more of] the loop [regions comprise] region comprises amino acid residues:
 - i) from 15 to 16 inclusive in an AB loop;
 - ii) from 22 to 30 inclusive in a BC loop;
 - iii) from 39 to 45 inclusive in a CD loop;
 - iv) from 51 to 55 inclusive in a DE loop;
 - v) from 60 to 66 inclusive in an EF loop, [and] or
 - vi) from 76 to 87 inclusive in an FG loop.





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